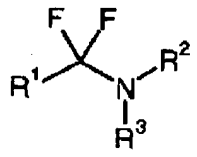
## Claim Status

1. (Original) Compounds of the formula (I)



(I)

in which

$R^1$ is hydrogen, $C_1$-$C_{12}$-alkyl, $[(C_2$-$C_{12}$-alkylene)-O$]_n(C_1$-$C_{12}$-alkyl)] where n = 1 to 5, $C_4$-$C_{15}$-arylalkyl or $C_3$-$C_{14}$-heteroaryl,

$R^2$ and $R^3$ are each independently $C_4$-$C_{15}$-arylalkyl or $C_1$-$C_{12}$-alkyl, or together are part of a cyclic radical having a total of 3 to 12 carbon atoms or

$R^1$ and $R^2$ and/or $R^3$ together are part of a cyclic radical having a total of 3 to 12 carbon atoms,

excluding 1,1-difluoromethyl-N,N-dimethylamine, 1,1-difluoromethyl-N,N-diethylamine, 1,1-difluoromethyl-N,N-diisopropylamine and 1,1-difluoro-N,N-2-trimethyl-1-propanamine.

2. (Original) Compounds according to Claim 1, characterized in that $R^1$ is hydrogen, $C_1$-$C_{12}$-alkyl or $C_3$-$C_5$-heteroaryl.

3. (Original) Compounds according to Claim 1, characterized in that $R^2$ and $R^3$ are each independently $C_1$-$C_8$-alkyl or $R^2$ and $R^3$ are part of a cyclical group, $NR^2R^3$ which as a whole is N-morpholinyl, N-methyl-1,4-piperazin-N-yl.

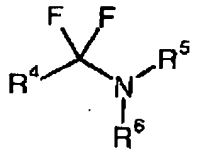
4. (Original) Compound of formula 1 selected from the group consisting of 1,1-difluoro-N,N-2,2-tetramethyl-1-propanamine, N,N-diethyl-α,α-difluoro-2,2-dimethyl-1-propanamine, N-(1,1-difluoromethyl)morpholine, N,N-

diethyl-α,α-difluoro-3-pyridylmethanamine, N,N-diethyl-α,α-difluoro-2-pyridylmethanamine and 2,2-difluoro-1,3,3-trimethylpyrrolidine.

5. (Original) Compound according to Claim 1 characterized in that the formula (I) as a whole is 2,2-difluoropyrrolidine, 2,2-difluoropiperidine, [2.2.2]-2,2,5,5-tetrafluoro-1,4-diazabicyclooctane or [2.2.2]-2,2,6,6-tetrafluoro-1,4-diazabicyclooctane.

6. (Original) Mixtures comprising

- compounds of the formula (Ia)



(Ia)

in which

$R^4$ is hydrogen, $C_1$-$C_{12}$-alkyl, $[(C_2$-$C_{12}$-alkylene)-O$]_n(C_1$-$C_{12}$-alkyl$)]$ where n = 1 to 5, $C_3$-$C_{14}$-aryl or $NR^7R^8$ where $R^7$ and $R^8$ are each independently $C_1$-$C_8$-alkyl, or $NR^7R^8$ as a whole is a 4- to 7-membered cyclic radical having a total of 3 to 12 carbon atoms and

$R^5$ and $R^6$ are each independently $C_1$-$C_{12}$-alkyl or are together part of a cyclic radical having a total of 4 to 12 carbon atoms or

$R^4$ and $R^5$ and/or $R^6$ together are part of a cyclic radical having a total of 4 to 12 carbon atoms,

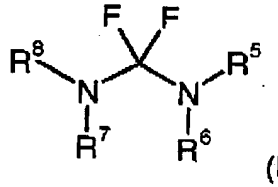
- at least one aprotic, tertiary amine which contains no fluorine atoms in the α-position to the nitrogen and/or at least one N-heteroaromatic compound and

- hydrogen fluoride.

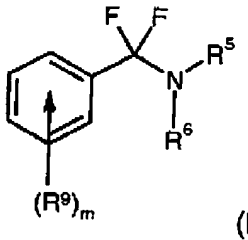
7. (Original) Mixtures according to Claim 6, characterized in that the molar ratio of aprotic tertiary amine and/or N-heteroaromatic compound to compounds of the formula (Ia) is 0.1 : 1 to 20 : 1.

8. (Original) Mixtures according to Claim 6, characterized in that the molar ratio of hydrogen fluoride to aprotic tertiary amine and/or N-heteroaromatic compound is 0.2 :1 to 10 : 1 per nitrogen atom.

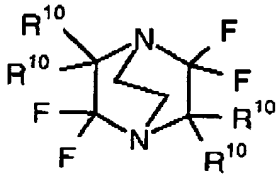
9. (Original) Mixtures according to Claim 6, characterized in that the compounds of formula (Ia) are those of the formula (I) as defined in claim 1 or those of the formulae (Ib), (Ic), (Id) or (Ie)



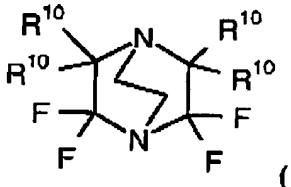
(Ib)



(Ic)



(Id)



(Ie)

in which

$R^5$, $R^6$, $R^7$ and $R^8$ are each as defined in Claim 6,

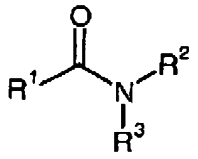
m is 0, 1, 2, 3 or 4 and

$R^9$ is a radical which is selected from the group of chlorine, fluorine, $C_1$-$C_{12}$-alkyl, $C_1$-$C_{12}$-fluoroalkyl, $C_1$-$C_{12}$-fluoroalkoxy, $C_1$-$C_{12}$-fluoroalkylthio, $C_1$-$C_{12}$-alkoxy and di($C_1$-$C_8$-alkyl)amino and

$R^{10}$ is in each case independently hydrogen or $C_1$-$C_{12}$-alkyl.

10. (Original) Process for preparing compounds according to Claim 1, comprising

- in step a), converting with halogenating agents the compounds of the Formula (V)

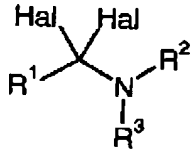


(V)

in which

$R^1$, $R^2$ and $R^3$ are each as defined in claim 1

to compounds of the formula (VI)



(VI)

in which

Hal is in each case independently chlorine or bromine and

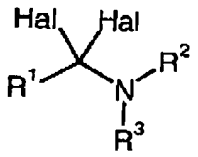
- in step, b), converting the compounds of the formula (VI), using ionic fluoride, to compounds of the formula (I).

11. (Original) Process according to Claim 10, characterized in that the halogenating agents used for step a) are phosphorus pentachloride, phosphorus pentabromide, thionyl chloride, thionyl bromide, phosgene and/or oxalyl chloride.

12. (Original) Process according to Claim 10, characterized in that the ionic fluorides used are quaternary ammonium or phosphonium fluorides or else alkali metal fluorides or mixtures of the compounds mentioned.

13. (Original) Process according to Claim 10, characterized in that the reactivity of the ionic fluorides is modified by additives.

14. (Original) Process for preparing mixtures according to Claim 6, comprising converting compounds of the formula (VI)



(VI)

in which

Hal is in each case independently chlorine or bromine in the presence of hydrogen fluoride and optionally reacting the resulting reaction mixture with aprotic tertiary amine which contains no fluorine atoms in the α-position to the nitrogen and/or N-heteroaromatic compound.

15. (Original) Process according to Claim 14, characterized in that compounds of the formula (VI) are reacted with sufficient hydrogen fluoride and sufficient aprotic, tertiary amine which contains no fluorine atoms in the α-position to the nitrogen and/or N-heteroaromatic compound is added to the resulting reaction mixture to provide the molar ratio of aprotic tertiary amine and/or N-heteroaromatic compound to compounds of the formula (Ia) is 0.1 : 1 to 20 : 1, and the molar ratio of hydrogen fluoride to aprotic tertiary amine and/or N-heteroaromatic compound is 0.2 : 1 to 10 : 1 per nitrogen atom.

16. (Original) Compounds of formula (VI) selected from the group consisting of 1,1-dichloromethyl-N,N-dimethylamine, 1,1-dichloromethyl-N,N-diethylamine, 1,1-dichloromethyl-N,N-diisopropylamine, 1,1-dichloro-N,N-2-trimethyl-1-propan-

amine, 1,1-dichloro-N,N-2,2-tetramethyl-1-propanamine, N,N-diethyl-α,α-dichloro-2,2-dimethyl-1-propanamine, N-(1,1-dichloromethyl)morpholine, 1,1-dichloro-N,N-dimethylphenylmethanamine, N,N-diethyl-α,α-dichloro-3-pyridylmethanamine, N,N-diethyl-α,α-dichloro-2-pyridylmethanamine and 2,2-dichloro-1,3,3-trimethylpyrrolidine.

17. (Original) Process for preparing fluorinated compounds, characterized in that compounds containing hydroxyl and/or carbonyl groups are reacted with compounds according to Claim 5 .

18. (Original) Process for preparing fluorinated compounds, characterized in that compounds containing hydroxyl and/or carbonyl groups are reacted with mixtures according to Claim 6.

19. (Original) Process according to Claim 17, characterized in that the compounds containing hydroxyl and/or carbonyl groups are those which contain at least one aliphatic hydroxyl group and/or at least one ketone group and/or at least one aldehyde group and/or one carboxyl group.

20. (Original) A process for preparing fluorine compounds from the corresponding hydroxyl compounds or for preparing geminal difluoro compounds from the corresponding carbonyl compounds comprising providing compounds according to Claim 5.

21. (Original) Process for preparing fluorine compounds from the corresponding hydroxyl compounds or for preparing geminal difluoro compounds from the corresponding carbonyl compounds comprising providing mixtures according to Claim 6.

22. (Original) A process for preparing pharmaceuticals, agrochemicals or liquid crystals comprising providing fluorinated compounds which have been prepared according to Claim 17.